

105. *Thryomanes bewickii calophonus*. Northwest Bewick Wren. Not uncommon resident.
106. *Troglodytes aedon parkmanii*. Pacific House Wren. Not common summer resident.
107. *Olbiorchilus hiemalis pacificus*. Western Winter Wren. Common resident.
108. *Cistothorus palustris paludicola*. Tule Wren. Rare summer resident.
109. *Sitta canadensis*. Red-breasted Nuthatch. Not common resident.
110. *Parus atricapillus occidentalis*. Oregon Chickadee. Common resident.
111. *Psaltriparus minimus*. Bush-Tit. Not common resident.
112. *Regulus satrapa olivaceus*. Western Golden-crowned Kinglet. Abundant winter resident.
113. *Regulus calendula*. Ruby-crowned Kinglet. Possibly partly resident. Common from Feb. 15 to May 1.
114. *Hylocichla ustulata*. Russet-backed Thrush. Rare summer resident.
115. *Merula migratoria propinqua*. Western Robin. Resident. Very rare in mid-winter. Abundant after Feb. 7.
116. *Ixoreus naevius*. Varied Thrush. Migrant. Common through March.
117. *Sialia mexicana occidentalis*. Western Bluebird. Resident. Very rare in mid-winter and not very common at any time.

ALL DAY WITH THE BIRDS.

Responses to the call for All Day studies of the birds during May show a gratifying interest in this intensive study of the migrations. It is not an easy task to spend an entire day, always on the keen edge, searching for birds, but no such effort goes unrewarded. One who has given much time to the study of the spring migrations hopes only to be able to spend more time during the next season. Constant study for three weeks or more, during which the birds are passing in the greatest numbers, might prove too wearing to even the most ardent student, but there are those of us who must learn by personal experience.

Reports received range from May 5 to May 23, and represent territory from New York City on the east to Rock Island, Ill., on the west, and latitude from Oberlin to Columbus, Ohio. The reports seem to prove that the height of the migrations for the region covered was between May 6 and 16, a

period of ten days. The Ohio and Illinois reports clearly indicate an exceptional abundance of birds, both in individuals and in species, for practically the whole period. At Oberlin the 21st was marked by a general departure of warblers and sparrows. But a discussion of the Northern Ohio migrations may be found elsewhere.

In the accompanying table, "A" indicates that the species was abundant, "C" that it was common, "T C" tolerably common, "F" few in numbers. "X" indicates that the species was recorded but the individuals not counted, and the numbers give the numbers of individuals seen when a count was made.

Explanations of the work done in the several places represented are given here together, so that the tabular arrangement may not be interfered with, and so that the reader may see at a glance the distribution so far as the reports give it. The Ohio reports are given precedence because they contain the largest number of species,

Oberlin, Ohio, May 9. Temperature 70 at 3 a. m., 54 at 9 a. m. Partly cloudy, clouding rapidly to a cold westerly rainstorm at 6:30 a. m., the rain ceasing in an hour, and afterward a gradual lightening of the clouds, with a brief show of the sun at 5 p. m. Wind westerly, heavy to strong. Time, 3 a. m. to 6:30 p. m. Oak Point and vicinity until 3:30 p. m., then a wheel ride twelve miles to Oberlin and two hours' work in the woods and fields northwest of Oberlin.

LYNDS JONES.

Tiffin, Ohio, May 10. Temperature (at Oberlin) 45 to 62. Wind west-south west, brisk. Showers 9:30 to 10 a. m., 1:30 to 2:30, 3:10 to 4:20 p. m. 4:30 to 10:15 a. m., fields, meadows and two woods one and one-half miles southeast of Tiffin; 11:15 a. m. to 1:30 p. m., due north of Tiffin along the Big Four tracks and a deserted reservoir, three miles; west one mile, 2:30 to 3:10 p. m.; north one mile and back along the Sandusky River, 4:30 to 5:20 p. m.; drive home across country, reaching home at 7:20 p. m.

REV. W. F. HENNINGER AND CARL HEILMANN.

Cadiz, Ohio, May 8. Temperature 60 to 70. Cloudy, with occasional light showers. Wind strong in the afternoon. Beginning at 4 a. m., time in field 11 hours. Walked fifteen miles, rode wheel fifteen miles. In woods and orchards around Cadiz.

HARRY B. MCCONNELL.

Columbus, Ohio, May 23. Temperature between 65 and 80. Clear and still in the forenoon, cloudy with light southwest wind afternoon. 3:00 a. m. to 9:30 p. m. Locality west of Columbus, and on the Ohio State University campus.

Z. P. METCALF.

Morton Park, Illinois, May 8. Day warm and cloudy with slight showers. Wind southerly. 5 a. m. to 1 p. m. ORPHEUS M. SCHANTZ

Rock Island, Illinois, May 14. Morning overcoat, cold, warming about noon. No wind. 5 a. m. to 7 p. m. About twelve miles south of Rock Island, Ill., including a drive to Milan. A cultivated region, with woods, thickets, fields and streams. BURTIS H. WILSON.

A TWO-DAY CENSUS.

Northern New Jersey. 6:15 p. m. May 6th to 4:55 p. m. May 8th.

May 6th. Station to house by wagon; 6½ miles; 1½ hours; 6:15 to 7:45. Weather mostly cloudy. 10 species, all seen later.

May 7th. Weather cloudy. 12 species heard from room before leaving it, all seen later.

5:05 a. m. to 8:05 a. m. Weather partly cloudy; 60 degrees at return. Partly in woods, partly along road past fields and a few houses. 41 species, including Yellow-throated Vireo and Chestnut-sided and Black-throated Green Warblers, not seen later

8:55 a. m. to 6:40 p. m. Weather partly cloudy. I walked up a creek till it dwindled to a brook, came back by road, and spent some time in higher woods. The hunt included low and high woods, fields, a creek, and a village. 54 species (59 for the day).

May 8th. 4:50 a. m. to 9:00 a. m. Weather, first half, foggy; second half, mostly fine. Entirely a road hunt: through fields and past farmhouses, a village, and an occasional small wood. 39 species, including Sparrow Hawk (1), Orchard Oriole (2), Scarlet Tanager (2), Red-eyed Vireo (4), House Wren (1), and White-breasted Nuthatch (4) not mentioned before.

9:50 a. m. to 1:30 p. m. Weather fine; 72 degrees at start, 77 degrees at return. Like the long hunt of preceding day, but not so extended. 38 species, none seen this hunt only, except Hairy Woodpecker (2.)

50 minutes spent near house, beginning at 2:30 p. m. yielded six species. 35 of these minutes were in woods, where we saw only several Swifts.

House to station, mostly by wagon; 4 miles; 3:35 to 4:35. 22 species, including Heron, species unknown (1), Mourning Dove, Bob-white (1 pair), and Bank Swallow not seen before, making me 68 species for the two days.

I was alone until Saturday night, (the 7th), when Mr. G. E. Hix joined me, and we were together from then on. He had hunted that afternoon, seeing Marsh Hawk and Cliff Swallow, the only ones seen.

The most striking thing about these hunts is the scarcity of migrants. The Warbler swarms which should have been met with every little way in the woods were almost entirely absent on Saturday and wholly so on Sunday.

CHARLES H. ROGERS.

West Chester County, N. Y., May 5. Temperature 75. Clear. 5 a. m. to 7:30 p. m.

FREDERICK C. HUBEL.

Cupola, Chester County, Penn., May 8. Weather clear and warm. Peach and cherry trees in full bloom, apple buds just bursting. 5 a. m. till dark. A 200 acre farm, with a creek and woods, carefully worked.

CHRESWELL J. HUNT.

	1 Oberlin, Ohio May 9	2 Tiffin, Ohio May 10	3 Cadiz, Ohio May 8	4 Columbus, O. May 23	5 Morton Park, Ill., May 8	6 Rock Island, Ill., May 14	7 West Chester N. Y., May 5	8 Nor. N. J. May 6, 6:15 p.m. to May 8, 8:55 p. m.	9 Cupola, Chester Co. Pa., May 8
Pied-billed Grebe.....	..	..	..	..	..	..	2	..
Herring Gull.....	2	..	..	..	..	..	50	..
Mallard.....	1	..	..	..	..	..	..	..
Great Blue Heron.....	..	1	..	1	..	x	..	..
Green Heron.....	3	7	..	x	..	..	..	x
Virginia Rail.....	3	..	..	..	..	..	..	..
Sora.....	2	..	..	..	..	..	..	..
American Woodcock.....	3	..	..	..	..	..	..	..
Wilson Snipe.....	7	..	..	..	..	..	..	..
Pectoral Sandpiper.....	..	2	..	..	..	..	..	..
Baird Sandpiper (?).....	..	2	..	..	..	..	..	..
Least Sandpiper.....	10	..	..	..	..	..	..	..
Red-backed Sandpiper.....	..	2	..	..	..	..	..	..
Greater Yellow-legs.....	2	1	..	..	x	..	..	..
Yellow-legs.....	3	4	..	x	..	..	..	..
Solitary Sandpiper.....	c	4	..	..	..	..	2	..
Bartramian Sandpiper.....	2	2	..	..	..	..	..	x
Spotted Sandpiper.....	c	11	x	x	x	..	6	x	
Killdeer.....	o	3	x	x	x	..	..	x
Bob-white.....	2	2	4	x	x	x	1	2	
Ruffed Grouse.....	..	..	1	..	..	..	1	..
Mourning Dove.....	c	7	x	x	x	x	2	1	
Turkey Vulture.....	..	1	..	x	..	..	1	x
Marsh Hawk.....	..	..	..	..	..	..	2	1
Sharp-shinned Hawk.....	..	..	..	x	..	..	1	..
Cooper Hawk.....	1	..	1	x	..	..	1	..
Red-tailed Hawk.....	2	1	1	x	..	x	2	..	
Red-shouldered Hawk.....	2	..	..	x	..	..	8	1
Broad-winged Hawk.....	1	..	..	..	..	..	1	..
Bald Eagle.....	..	..	..	..	..	..	..	1
Am. Sparrow Hawk.....	3	2	..	x	..	..	..	1
Am. Osprey.....	..	..	..	..	..	..	3	x
Barred Owl.....	2	..	1	..	..	..	1	..
Screech Owl.....	1	1	..	1	..	x	2	..	
Great Horned Owl.....	1	..	1	1	..	..	..	..
Yellow-billed Cuckoo.....	..	1	..	x	x	..	3	..	
Black-billed Cuckoo.....	4	1	..	..	..	..	..	1
Belted Kingfisher.....	2	1	x	x	..	..	7	..
Hairy Woodpecker.....	1	1	x	x	..	x	4	1	
Downy Woodpecker.....	4	5	x	x	x	x	7	1	
Yellow-bellied Sapsucker.....	1	..	..	..	x	..	7	..
Red-headed Woodpecker.....	c	12	x	x	x	x	1	..	
Red-bellied Woodpecker.....	..	1	x	x	..	x	..	x	
Northern Flicker.....	c	8	x	x	x	x	12	5	
Whippoorwill.....	7	1	..	..	..	x	..	..
Nighthawk.....	2	2	..	x	..	x	1	..	
Chimney Swift.....	c	30	x	x	x	x	A	50	
Ruby-throated Hummingbird.....	3	1	2	x	..	x	..	..
Kingbird.....	6	2	x	x	..	x	3	4	
Crested Flycatcher.....	c	1	x	x	..	x	1	3	

	1	2	3	4	5	6	7	8	9
Phoebe.....	c	5	x	x	x	x	14	8	x
Wood Pewee.....	c	6	x	x	x	x	11		x
Yellow bellied Flycatcher.....	1								
Green-crested Flycatcher.....	5	3							
Alder Flycatcher.....	7	4		x		x			
Least Flycatcher.....	c	1	x		x		6	4	
Prairie Horned Lark.....	4	3		x		x			
Blue Jay.....	c	3	x	x	x	x	12	8	x
Am. Crow.....	c	11	x	x	x	x	75	27	x
Bobolink.....	c	15	x	x	x	x	26	3	
Cowbird.....	c	15	x	x	x	x	4	4	x
Red-winged Blackbird.....	c	10	x	x	x	x	80	8	x
Meadowlark.....	c	35	x	x	x	x	23	13	x
Orchard Oriole.....	6	2	x	x		x		2	
Baltimore Oriole.....	c	20	x	x	x	x	9	3	x
Purple Grackle.....								2	x
Bronzed Grackle.....	c	10	x	x	x	x	8		
Purple Finch.....	2							16	
Am. Goldfinch.....	c	8	x	x		x	1	26	x
Vesper Sparrow.....	c	12	x	x			7	3	x
Savanna Sparrow.....		1							
Grasshopper Sparrow.....	4	9	x	x	x			4	x
Henslow Sparrow.....									x
Lark Sparrow.....						x			
White crowned Sparrow.....	c	4	2	1	x		3		
White-throated Sparrow.....	c	6	x	3	x	x		10	
Tree Sparrow.....		1					4		
Chipping Sparrow.....	c	10	x	x		x	40	12	
Field Sparrow.....	c	2	x	x	x	x	20	7	x
Slate-colored Junco.....							4	1	
Song Sparrow.....	c	30	x	x	x	x	70	25	x
Swamp Sparrow.....	c					x		7	
Towhee.....	c	4	x	x	x	x	2	2	x
Cardinal.....	3	6	x	x	x				x
Rose breasted Grosbeak.....	10	3	x	1	x	x			
Indigo Bunting.....	c	6	x	x	x	x			
Dickeissel.....	2	1		x		x			
Scarlet Tanager.....	c	5	x	x	x	x	1	2	
Purple Martin.....	5	3		x	x	1	40		
Cliff Swallow.....	tc			x		x	16	1	
Barn Swallow.....	c	6	x	x		x	20	22	x
Tree Swallow.....	2						5		
Bank Swallow.....	c	3	x	1		x		2	
Rough-winged Swallow.....	tc	10					1		
Cedar Waxwing.....	5								
Migrant Shrike.....	1	1				x			
Red-eyed Vireo.....	c	3	x	x	x	x		4	x
Warbling Vireo.....	c	8	x	x					
Yellow-throated Vireo.....	tc	4	2	x		x			
Blue headed Vireo.....	tc	2	1						
White-eyed Vireo.....					x			4	x
Bell Vireo.....						x			
Black and White Warbler.....	c	1	1	x				6	x
Prothonotary Warbler.....	1				x				
Blue-winged Warbler.....		6				x		2	x
Golden-winged Warbler.....		1							
Nashville Warbler.....	c					x			
Orange-crowned Warbler.....	1	1				x			

	1	2	3	4	5	6	7	8	9
Tennessee Warbler.....	c	2	x			x			
Northern Parula Warbler.....		6						5	
Yellow Warbler.....	c	20	x	x	x	x	4	8	x
Black-throated Blue Warbler..	c	1	2	x	x				
Myrtle Warbler.....	c	5	3		x			6	x
Magnolia Warbler.....	c	15	x	x	x	x			
Cerulean Warbler.....	1	1	3	1					
Chestnut-sided Warbler.....	c	2	x		x	x			
Bay-breasted Warbler.....	tc	2		x	x	x			
Black-poll Warbler.....	1	6		x	x	x			x
Blackburnian Warbler.....	c	1	2	x	x	x	1	1	
Black-throated Green Warbler	c	2	x		x	x			
Kirtland Warbler.....	1								
Pine Warbler.....		2							
Palm Warbler.....		2			x				
Prairie Warbler.....	1								
Oven-bird.....	c	3	x	x	x	x		6	x
Water-Thrush.....	7		1			x		2	
Louisiana Water-Thrush.....	2	1	x	x					
Kentucky Warbler.....			x	3					
Connecticut Warbler.....	2								
Mourning Warbler.....	tc	1		1					
Northern Yellow-throat.....	c	8	1	x	x	x		10	x
Yellow-breasted Chat.....	tc	5	x	x				2	x
Hooded Warbler.....	1								
Wilson Warbler.....	1	1		2					
Canadian Warbler.....	tc	2	2						x
Am. Redstart.....	c	11	x	x	x	x		7	x
Am. Pipit.....	c							35	
Catbird.....	c	50	x	x	x	x	18	18	x
Brown Thrasher.....	tc	2	x	x	x	x	2	1	x
Carolina Wren.....			1	x					
House Wren.....	c	16		x		x	10	1	x
Winter Wren.....	1		1						
Long-billed Marsh Wren.....	2								
Brown Creeper.....							1		
White-breasted Nuthatch.....	5	2	x	x		x	8	4	x
Red-breasted Nuthatch.....	c						15		
Tufted Titmouse.....	5	5	x	x				4	
Chickadee.....	7	2	x	x	x	x	20		
Golden-crowned Kinglet.....		4					1		
Ruby-crowned Kinglet.....	tc	1		x	x	x			
Blue-gray Gnatcatcher.....	c	20		x					
Wood Thrush.....	c	9	x	x	x	x	16	5	x
Wilson Thrush.....	c	2	x			x	2	2	
Gray-cheeked Thrush.....	c				x	x			
Olive-backed Thrush.....	c	1	x		x	x			
Hermit Thrush.....	2	1					1		
Am. Robin.....	c	50	x	x	x	x	A	50	x
Bluebird.....	c	6	x	x	x	x	18	9	x
Totals.....	128	112	80	90	56	76	65	66	53